METROPOLITAN GOVERNMENT of NASHVILLE and DAVIDSON COUNTY TENNESSEE

Metropolitan Health Department
Pollution Control Division
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PART 70 OPERATING PERMIT APPLICATION
STORAGE TANKS

1. Facility Name:	2. Storage Tank Number	3. Stack or Fugitive Release Point No.:

4. Emission source number, description and source classification code(s):

_____

_____

_____

5. Storage Tank Capacity Gallons	6. Year of Installation	7. Tank Height: _____ (Ft.)	8. Tank Diameter: _____ (Ft)

9. Tank Color: _____ ; Paint Condition: _____ Good: _____ Poor

Roof Color: _____ ; Paint Condition: _____ Good: _____ Poor

10. Is this tank equipped with submerged fill pipe? Yes No

11. Is this tank equipped with pressure/vacuum conservation vent? _____ Yes _____ No

If yes, at what pressure is it set? _____ (PSIG); at what vacuum is it set? _____ (PSIG)

12. Type of storage tank (check one): _____ Fixed Roof; _____ External floating roof
_____ Internal floating roof; _____ Other (specify) _____

13. For fixed roof tanks:
A. Tank configuration (check one): _____ Vertical (upright cylinder) _____ Horizontal

B. Tank roof type (check one): _____ Flat;
_____ Cone roof, indicate tank roof height: _____ (Ft): or
_____ Dome roof, indicate tank roof height: _____ (Ft); and
indicate shell radius: _____ (Ft).

C. Maximum liquid height: _____ (Ft) D. Average liquid height: _____ (Ft).

14. For floating roof tanks (both internal and external) - Shell condition (check one):
_____ Light rust: _____ Dense rust: _____ Gunite lined

15. For external floating roof tanks:
A. Tank construction (check one): _____ Welded tank; _____ Riveted tank
B. Rim seal system description:
Primary (check one): _____ Vapor-mounted; _____ Liquid-mounted; _____ Mechanical shoe
Secondary (check one): _____ Weather shield; _____ Rim-mounted; _____ None
C. Roof type (check one): _____ Pontoon roof; _____ Double deck roof
D. Roof fitting types:

Access Hatch (24" Dia.Well)	Unslotted Guide-Pole Well (8" Diameter Unslotted Pole, 21" Dia. Well)	Gauge-float Well (20" Dia.)
_____ Bolted cover, gasketed	_____ Ungasketed sliding cover	_____ Unbolted cover, ungasketed
_____ Unbolted cover, gasketed	_____ Gasketed sliding cover	_____ Unbolted cover, gasketed
_____ Unbolted cover, ungasketed		_____ Bolted cover, gasketed

(Continued)

15. D. Roof fitting types (indicate the number of each type):

Gauge Hatch/Sample Well (8" Diameter	Vacuum Breaker (10" Diameter Well)	Slotted Guide-Pole/Sample Well (8" Diameter Slotted Pole) (21" Diameter Well)
Weighted mechanical	Weighted mechanical	Ungasketed sliding cover, without float
Actuation gasketed	Actuation gasketed	Ungasketed sliding cover, with float
Weighted mechanical	Weighted mechanical	Gasketed sliding cover, without float
Actuation ungasketed	Actuation ungasketed	Gasketed sliding cover, with float

Roof Drain	Roof leg (3" Diameter)	Roof Leg (2-1/2" Diameter)
Open	Adjustable, Pontoon Area	Adjustable, Pontoon Area
90% Closed	Adjustable, Center Area	Adjustable, Center Area
	Adjustable, Double-Deck Roofs	Adjustable, Double-Deck Roofs
	Fixed	Fixed

16. For internal floating roof tanks:

A. Rim seal system description: Primary (check one): _____ Liquid-mounted; _____ Vapor-mounted
Secondary (check one): _____ Yes _____ No

B. Number of columns: _____

C. Effective column diameter: _____ (Ft.)

D. Deck type (check one): _____ Welded; _____ Bolted

E. If bolted, indicate the total deck seam length: _____ (Ft.)

F. Deck area _____ (Square Feet)

G. Deck fitting types (indicate the number of each type):

Access Hatch (24" Diameter Well)	Automatic Gauge Float Well	Ladder Well
Bolted cover, gasketed	Bolted cover, gasketed	Sliding cover, gasketed
Unbolted cover, gasketed	Unbolted cover, gasketed	Sliding cover, ungasketed
Unbolted cover, ungasketed	Unbolted cover, ungasketed	

COLUMN WELL	SAMPLE PIPE OR WELL
Built-up column-sliding cover, gasketed	Slotted pipe-sliding cover, gasketed
Built-up column-sliding cover, ungasketed	Slotted pipe-sliding cover, ungasketed
Pipe column-flexible fabric sleeve seal	Sample well-slit fabric seal, 10% open area
Pipe column-sliding cover, gasketed	Stub drain, 1 inch diameter
Pipe column-sliding cover, ungasketed	

Roof Leg or Hanger Well	Vacuum Breaker
Adjustable Fixed	Weighted Mechanical actuation, gasketed
	Weighted mechanical actuation, ungasketed

(Continued)

17. For variable vapor space tanks: Volume expansion capacity: _____ (gallons)

18. Complete the following table for products to be stored in this tank:

Part (1)

Product Stored	Storage Dates	Annual Thruput (Gal/Yr)	Liquid Molecular Weight (Lb/Lb Mole)	Vapor Molecular Weight (Lb/Lb Mole)

Part (2)

Product Stored	Vapor Pressure (PSIA)	Minimum Vapor Pressure (PSIA)	Maximum Vapor Pressure (PSIA)	Liquid Density (Lb/Gal)	Average Storage Temperature (^{o}F)

19. List hazardous air pollutant constituents below (attach sheet if additional space needed):

Chemical Name	CAS Number	Percent of Total Liquid Wt. (%)	Percent of Total Vapor Wt. (%)	Chemical Name	CAS Number	Percent of Total Liquid Wt. (%)	Percent of Total Vapor Wt. (%)
1.				6.			
2.				7.			
3.				8.			
4.				9.			
5.				10.			

20. Is this tank equipped with air pollution control equipment for the purpose of achieving compliance with an applicable requirement? _____Yes _____No

If yes, attach the appropriate air pollution control equipment form(s) APC V.11 through APC V.18.

21. Is this source emissions or operations monitored to demonstrate compliance with an applicable requirement? _____Yes _____No

If yes, please attach the appropriate monitoring forms APC V.19 through APC V.27.

22. Is this source subject to 40 CFR Part 64 - Enhanced Monitoring Program? _____Yes _____No.

If yes, please identify the stack or fugitive release point(s) and pollutant(s) to be monitored for this purpose:

23 Page Number: _____ Revision Number: _____ Date of Revision: _____

INSTRUCTIONS FOR APC FORM V.6A:

STORAGE TANKS

Sources that are required to obtain a permit in accordance with Regulation No. 13, "Part 70 Operating Permit Program" of the Code of the Metropolitan Government of Nashville and Davidson County, Tennessee, must complete and return this form, if applicable. Applications are incomplete unless all applicable information requested herein is supplied. Failure to supply any additional information requested by the Director to enable him to act on the application may result in denial of this application. If there is additional information that will not fit on a form, please declare the information on additional sheet(s) and attach it to the back of the original.

COMPLETE ONE FORM FOR EACH STORAGE TANK FOR WHICH AN AIR POLLUTION CONTROL PERMIT IS REQUIRED (Expect for Gasoline Dispensing Facilities).

If you wish to have operating permit restrictions, please indicate this in writing. Otherwise, permit is based on 8,760 Hrs/Yr.

Item 2 Assign an identification number to this storage tank (e.g., T1, T2, etc.).

Item 7 If the tank roof is sloped, provide the average tank height.

Item 10 A submerged fill pipe is any fill pipe with a discharge opening which is entirely submerged when the liquid level is six inches above the tank bottom.

Item 13 Check the tank roof type which applies and supply the required information. the following equation can be used to calculate the tank roof height of a cone roof tank:

$$H = S \times R$$

Where H is the tank roof height, Ft.
S is the tank cone roof slope, if unknown a standard value of 0.0625 Ft/Ft can be used, Ft/Ft.
R is the tank shell radius, Ft.

The following equation can be used to calculate the tank roof height of a dome roof tank:

$$H = R_R - (R_R^2 - R_S^2)^{0.5}$$

Where H is the tank roof height, Ft.
R_R is the tank dome roof radius, Ft.
R_S is the tank shell radius, Ft.

Item 14 Check the shell condition which best applies if the storage tank is a floating roof type (either internal or external).

Item 15B Check the appropriate rim seal type if the storage tank is an external floating roof type.

Item 15C Check the appropriate roof type if the storage tank is an external floating roof type.

Item 15D Indicate the total number of each appropriate roof fitting type in the space provided if the storage tank is an external floating roof tank.

Item 16A Check the appropriate rim seal type if the storage tank is an internal floating roof type.

Item 16B Indicate the number of fixed roof support columns if the tank is an internal floating roof type. Indicate zero support columns if the fixed roof is self supported.

INSTRUCTIONS FOR APC FORM V.6A:

STORAGE TANKS

Item 16C Indicate the effective column diameter (Ft) if the storage tank is an internal floating roof type. Use the column perimeter (Ft)/3.14 or 1.1 Ft for a 9-inch by 7-inch built-up column, 0.7 Ft for 8-inch diameter pipe columns, and 1.0 if column construction details are not known.

Item 16D Check the appropriate deck type if the storage tank is an internal floating roof type.

Item 16E Indicate the total deck seam length if the storage tank is an internal floating roof type with a bolted deck.

Item 16F Indicate the deck area if the storage tank is the internal floating roof type.

Item 16G Indicate the total number of each appropriate deck fitting type in the space provided if the storage tank is an internal floating roof type.

Item 17 Indicate the volume expansion capacity of the variable vapor space achieved by roof lifting or diaphragm flexing if the tank is a variable vapor space type.

Item 18 If the tank is used for more than one product, clearly specify each separate product. Vapor pressures should be given as true vapor pressures at the reported tank conditions. The months of storage for each product must be indicated in the "Storage Dates" column. Attach additional sheet outlining any alternative operating scenarios, or to define permit terms and conditions allowing emissions trading under a federally enforceable emissions cap to be established in the permit.

Item 19 For each hazardous air pollutant constituent indicate the CAS Number and the percent of total liquid weight. Do not list the percent emitted.

Item 22 Indicate whether or not this source is subject to 40 CFR Part 64 - Enhanced Monitoring Program. If the answer is yes, please indicate which stack(s) or fugitive release point(s) will require monitoring and indicate which pollutant(s) requires monitoring.

IF ANY ITEM ON THIS APPLICATION FORM IS NOT APPLICABLE TO THIS FACILITY, THE ITEM MUST BE FILLED IN WITH "NOT APPLICABLE" OR "N/A".